INSULATED IMPLANTABLE ELECTRICAL CIRCUIT

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ABSTRACT OF THE DISCLOSURE

The invention is directed to an implantable insulated electrical circuit that utilizes polyparaxylylene, preferably as Parylene, a known polymer that has excellent living tissue implant characteristics, to provide for chronic implantation of conductive electrical devices, such as stimulators and sensors. The device is thin, flexible, electrically insulated, and stable after long exposure to living tissue. Layers of Parylene may be combined with layers of a polymer, such as polyimide, to yield greater design flexibility in the circuit. Multiple electrical conduction layers may be stacked in the circuit to increase packing density.